What is claimed is:

1   Claim 1.   An isolated glycogonjugate peptide.

1   Claim 2.   An isolated glycoconjugate comprising at least one
2 carbohydrate moiety associated with a peptide having the amino acid sequence of
3 SEQ ID NO. 1.

1   Claim 3.   An isolated glycoconjugate comprising at least one
2 carbohydrate moiety associated with a peptide having the amino acid sequence of
3 SEQ ID NO. 2.

1   Claim 4.   A peptide having the amino acid sequence of SEQ ID NO. 1.

1   Claim 5.   A peptide having the amino acid sequence of SEQ ID NO. 2.

1   Claim 6.   A method of inhibiting or preventing the attachment of influenza
2 virus particles to the cells of a human patient comprising administering to the
3 patient a therapeutically effective amount of a glycoconjugate to thereby bind to
4 said influenza virus particles and thereby inhibit or prevent the attachment of said
5 particles to the cells.

1   Claim 7.   The method of claim 6 wherein the glyconjugate comprises a
2 neuraminic acid-hexosamine linkage.

1   Claim 8.   The method of claim 6 wherein the patient is in the first or
2 second trimester of pregnancy.

1   Claim 9.   A method of treating schizophrenia comprising administering to
2 a patient in need thereof a therapeutically effective amount of D-glucosamine-HCl
3 to thereby increase the concentration of brain glyconjugates in said patient.

1   Claim 10.   The method of claim 9 wherein said therapeutically effective
2   amount is in the range of from about 50 to about 500 mg per day.

1   Claim 11.   The method of claim 9 wherein said therapeutically effective
2   amount is about 200 mg per day.

1   Claim 12.   A purified monoclonal antibody which specifically recognizes a
2   peptide having the amino acid sequence of SEQ ID NO. 1.

1   Claim 13.   A purified monoclonal antibody which specifically recognizes a
2   peptide having the amino acid sequence of SEQ ID NO. 2.

Claim 14.   A purified monoclonal antibody which specifically recognizes
aglyco protein 10B.

1   Claim 15.   A therapeutic composition for increasing antimalignin antibody
2   concentration in a patient in need thereof comprising a peptide selected from the
3   group consisting of a peptide of SEQ ID NO. 1, a peptiode of SEQ ID NO. 2,
4   aglycoprotein 10B,and combinations thereof.

1   Claim 16.   A method of treating chronic viral infection comprising
2   administering to a patient in need thereof a therapeutically effective amount of a
3   peptide selected from the group of consisting of a peptide of SEQ ID NO. 1, a
4   peptide of SEQ ID NO. 2, aglycoprotein 10B, and combinations thereof.

1   Claim 17.   The method of claim 16 wherein the chronic viral infection is
2   HIV.

1   Claim 18.   A method of diagnosing cancer associated with chronic viral
2   disease in a patient comprising detecting transformation to malignant cells in said
3   patient, said transformation being detected by a determination of an elevated level

4   of aglycoprotein 10B antibody in blood or aglycoprotein antigenic peptides in blood

5   or tissue of said patient.

1   Claim 19.   The method of claim 18 wherein the cancer associated with

2   chronic viral disease is hepatocarcinoma.

1   Claim 20.   A therapeutic composition comprising purified antibody which

2   specifically recognizes a peptide selected from the group consisting of a peptide of

3   SEQ ID NO. 1, a peptide of SEQ ID NO. 2, aglycoprotein 10B.

1   Claim 21.   A method of treating brain tumors comprising administering to

2   a patient in need thereof a therapeutically effective amount of diphenylhydantoin to

3   thereby increase the level of brain glycoconjugates in said patient.

1   Claim 22.   The method of claim 19 wherein the therapeutically effective

2   amount is in the range of from about 0.5 to about 2 mg/kg body weight.

1   Claim 23.   A kit for determining the concentration of aglycoprotein 10B

2   antigenic epitopes present in blood of a patient comprising at least one blood

3   collection tube or pipette and anti-malignin antibody.

1   Claim 24.   The kit according to claim 21 wherein said antibody is coated

2   on the inner surface of the test tube or pipette.

1   Claim 25.   A kit for determining the concentration of anti-malignin antibody

2   present in blood of a patient comprising at least one blood collection tube or pipette

3   and peptide having the amino acid sequence of SEQ ID NO. 1 or SEQ ID NO. 2.

1   Claim 26.   The kit of claim 23 wherein the peptide is coated on the inner

2   surface of the tube or pipette.

1   Claim 27.   An isolated nucleic acid encoding a peptide comprising the
2   amino acid acid sequence of SEQ ID NO. 1 or SEQ ID NO. 2.

1   Claim 28.   A method for diagnosing cancer in a patient which comprises
2   determining the presence of aglycoprotein 10B antigenic peptide in the blood of
3   said patient.

1   Claim 29.   A method for determining the presence of aglyco products in
2   the blood or tissue of a patient which comprises
3
4   1) determining the amount of carbohydrate moieties of glycoproteins
5   isolated from the blood or tissue of said patient; and
6
7   2) comparing the amount of said carbohydrate moieties to the amount of
8   carbohydrate moities associated with glycoproteins isolated from blood or tissue of
9   healthy control individuals.

1   Claim 30.   The method of claim 29 further comprising the step of
2   determining the presence and concentration of antibodies to aglycopeptides in the
3   blood of said patient.

1   Claim 31.   A method of diagnosing schizophrenia in a patient which
2   comprises
3   1) measuring the amount of neuraminic acid and hexosamine in
4   glycoproteins isolated from cerbral spinal fluid of said patient;
5
6   2) comparing said amount to a level of neuraminic acid and hexosamine in
7   glycoproteins isolated from cerbral spinal fluid of healthy individuals; and
8
9   3) correlating the amount of neuraminic acid and hexosamine in
10   glycoproteins isolated from cerbral spinal fluid of said patient to the presence or
absence of schizophrenia.